

ATTORNEY DOCKET NO. SAMS01-00063
U.S. SERIAL NO. 09/212,852
PATENT

REMARKS

Claims 1-20 are pending in the present application.

Claims 1-20 have been rejected.

Claims 1-4, 6-12, 14, 15 and 17-20 have been amended.

Claim 16 has been cancelled.

New Claim 21 has been added.

Claims 1-15 and 17-21 remain in the present application.

The claims are listed in their current form, with amendment markings, in Appendix A for the Examiner's easy reference. Reconsideration of the amended claims is respectfully requested.

In Sections 1 and 2 of the April 9, 2002 Office Action, the Examiner rejected Claims 1-20 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time of the application was filed, had possession of the claimed invention. The Examiner asserted that the amendments made to Claims 1, 9 and 17 in the October 5, 2001 Amendment and Response to Office Action lacked support in the specification. The Application respectfully disagrees with the Examiner's assertions regarding a lack of support for the amendments previously made to Claims 1, 9 and 17. However, this point is now moot in view of new amendments made in this document that have effectively removed the amendments made in the October 5, 2001 Amendment and Response to Office Action.

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In Sections 3 and 4 of the April 9, 2002 Office Action, the Examiner rejected Claims 1-5, 7-13, and 15-20 under 35 U.S.C. §102 as being anticipated by the admitted prior art shown in Figure 2 of the originally filed application and described in the corresponding text (hereafter, simply "the Admitted Prior Art"). In Sections 5 and 6 of the April 9, 2002 Office Action, the Examiner rejected Claims 6, 14 and 19 under 35 U.S.C. §103(a) as being unpatentable over the Admitted Prior Art in view of United States Patent No. 5,887,256 to *Lu et al.* (hereafter, simply "*Lu*").

Applicant respectfully submits that the Examiner's rejection of Claims 1-20 are now moot in view of the amendments to the claims. Applicant has amended the claims to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the claims have been amended to point out the differences between the radio link protocol functions of the air interface and the physical layer protocol functions of the wireline interface. The wireless network recited in the claims have a wireless (i.e., over-the-air) interface between the base stations and the mobile stations and a wireline interface between the mobile switching center and external networks, such as the Internet or the public switched telephone network (PSTN). According to the amended claims, the radio link protocol functions (e.g., data framing, encoding, etc.) that control transmissions in the air interface are associated with the base stations and are segregated from the physical layer protocol functions (i.e., vocoding, data packet services) that control transmissions over the wireline interface and that are associated with the mobile switching center.

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The call control and mobility management (CCMM) unit 144 shown in the Admitted Prior Art and cited by the Examiner as a radio independent function is neither a radio link protocol function in the air interface nor a physical layer protocol function in the wireline interface. CCMM unit 144 performs a much higher level function involving user invoked features, such as three-way calling. Applicant respectfully requests reconsideration of the claims in view of the amendments thereto.

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SUMMARY

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *jmockler@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Deposit Account No. 50-0208.

Respectfully submitted,

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Date: 10 June 2002



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APPENDIX A

AMENDMENTS WITH MARKINGS TO SHOW CHANGES MADE

1. (Twice Amended) For use in a CDMA wireless network comprising a plurality of base stations capable of communicating with a plurality of mobile stations located in a coverage area of said CDMA wireless network, a partitioned selection and distribution unit (SDU) comprising:

a first controller associated with a first one of said plurality of base stations capable of performing [all radio dependent] radio link protocol functions [for calls involving said selection and distribution unit, wherein said radio dependent functions are] related to [a transfer of] wireless [traffic] communication links between said [plurality of base stations] first base station and at least one of said plurality of mobile stations; and

a second controller [disposed apart from said first controller] associated with a mobile switching center (MSC) of said CDMA wireless network [and] capable of performing [all radio independent] physical layer protocol functions [for said calls involving said selection and distribution unit, wherein said radio independent functions are] related to [a transfer] transmission of wireline data comprising at least one of voice traffic[, and data traffic[, and signaling traffic] between said CDMA wireless network and a wired network coupled to said CDMA wireless network.

2. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said [radio dependent functions] radio link protocol functions comprise selection of preferred ones of incoming wireless traffic frames received from said [plurality of base stations] first base station.

3. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said [radio dependent functions] radio link protocol functions comprise controlling a transmission power of a selected one of said plurality of mobile stations.

4. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said [radio independent functions] physical layer protocol functions comprise a decompression of voice traffic from a first bit rate to a second bit rate.

5. The partitioned selection and distribution unit set forth in Claim 4 wherein said decompression is performed by a vocoder.

6. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said [radio independent functions] physical layer protocol functions comprise a transcoding of circuit data from a first bit rate to a second bit rate.

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7. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said [radio independent functions] physical layer protocol functions comprise a conversion of data frames received from said [base stations] first base station to data packets suitable for transmission over a packet data network coupled to said CDMA wireless network.

8. (Amended) The partitioned selection and distribution unit set forth in Claim 1 wherein said first controller is disposed in [one of said plurality of base stations] said first base station and said second controller is disposed in [a] said mobile switching center (MSC) [associated with said CDMA wireless network].

9. [Twice Amended] A CDMA wireless network capable of communicating with a plurality of mobile stations located in a coverage area of said CDMA wireless network, said CDMA wireless network comprising;

a plurality of base stations capable of wirelessly communicating with said plurality of mobile stations, [at least] a first one of said plurality of base stations comprising a first controller capable of performing [all radio dependent] radio link protocol functions [for calls involving said plurality of mobile stations, wherein said radio dependent functions are] related to [a transfer of call traffic] wireless communication links between said [plurality of base stations] first base station and said plurality of mobile stations; and

a mobile switching center capable of transferring [said] call traffic between said plurality of base stations and a wired network coupled to said CDMA wireless network, said mobile switching center comprising a second controller capable of performing [all radio independent] physical layer protocol functions [for said calls involving said plurality of mobile stations, wherein said radio independent functions are] related to [a transfer] transmission of wireline data comprising at least one of voice traffic[,] and data traffic[,] and signaling traffic] between said CDMA wireless network and said wired network.

10. (Amended) The CDMA-based wireless network set forth in Claim 9 wherein said [radio dependent functions] radio link protocol functions comprise selection of preferred ones of incoming wireless traffic frames received from said [plurality of base stations] first base station.

11. (Amended) The CDMA-based wireless network set forth in Claim 9 wherein said [radio dependent functions] radio link protocol functions comprise controlling a transmission power of a selected one of said plurality of mobile stations.

12. (Amended) The CDMA-based wireless network set forth in Claim 9 wherein said [radio independent functions] physical layer protocol functions comprise a decompression of voice traffic from a first bit rate to a second bit rate.

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13. The CDMA-based wireless network set forth in Claim 12 wherein said decompression is performed by a vocoder.

14. (Amended) The CDMA-based wireless network set forth in Claim 9 wherein said [radio independent functions] physical layer protocol functions comprise a transcoding of circuit data from a first bit rate to a second bit rate.

15. (Amended) The CDMA-based wireless network set forth in Claim 9 wherein said [radio independent functions] physical layer protocol functions comprise a conversion of data frames received from said [base stations] first base station to data packets suitable for transmission over a packet data network coupled to said CDMA wireless network.

16. [Cancelled].

17. (Amended) A method of operating a CDMA wireless network comprising a plurality of base stations capable of communicating with a plurality of mobile stations located in a coverage area of the CDMA wireless network, the method comprising the steps of:

receiving in [at least one] a first base station at least one of voice traffic[,] and data traffic[, and signaling traffic] transmitted by a selected one of the plurality of mobile stations;

performing in the [at least one] first base station [all radio dependent] radio link protocol functions [for handling said at least one of voice traffic, data traffic, and signaling traffic, wherein the radio dependent functions are] related to [a transfer of] wireless communication links [traffic] between the [at least one] first base station and the selected mobile station; and

performing [all radio independent] physical layer protocol functions [for said handling of said at least one of voice traffic, data traffic, and signaling traffic] in a mobile switching station of the CDMA wireless network, wherein the [radio independent] physical layer protocol functions are related to [a transfer] transmission of wireline data comprising at least one of [the at least one of] voice traffic[,] and data traffic[, and signaling traffic] between the CDMA wireless network and a wired network coupled to the CDMA wireless network.

18. (Amended) The method set forth in Claim 17 wherein the [radio dependent] radio link protocol functions comprise at least one of selection of preferred ones of incoming wireless traffic frames received from the [plurality of base stations] first base station and controlling a transmission power of a selected one of the plurality of mobile stations.

19. (Amended) The method set forth in Claim 17 wherein the [radio independent functions] physical layer protocol functions comprise at least one of decompressing voice traffic

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from a first bit rate to a second bit rate and transcoding circuit data from a first bit rate to a second bit rate.

20. (Amended) The method set forth in Claim 17 wherein the [radio independent functions] physical layer protocol functions comprise a conversion of data frames received from the [plurality of base stations] first base station to data packets suitable for transmission over a packet data network coupled to the CDMA wireless network station.

21. (New) The method set forth in Claim 19 wherein the step of decompressing voice traffic from a first bit rate to a second bit rate is performed by a vocoder.